
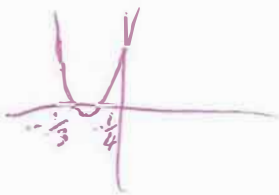


31st January	
Expand and simplify $(2x + 3)^3$ $(2x+3)(2x+3)(2x+3)$ $(4x^2 + 12x + 9)(2x+3)$	 Corbettmaths $8x^3 + 12x^2 + 24x^2 + 36x + 18x + 27$ $8x^3 + 36x^2 + 54x + 27$
Make m the subject of the formula $E = mgh + \frac{1}{2}mv^2$ $\times 4$ $4E = 4mgh + mv^2$ $4E = m(4gh + v^2)$	$m = \frac{4E}{4gh + v^2}$
Calculate the sum of the first 50 odd numbers $1, 3, 5, \dots, 95, 97, 99$ Pairing up $1 \text{ } 2 \text{ } 99$ $3 \text{ } 2 \text{ } 97$ $5 \text{ } 2 \text{ } 95$ etc	$25 \text{ pairs of } 100$ $25 \times 100 = 2500$
Solve the inequality $12x^2 + 7x + 1 \leq 0$ $(4x+1)(3x+1) = 0$ $x = -\frac{1}{4} \text{ or } -\frac{1}{3}$	 $-\frac{1}{3} \leq x \leq -\frac{1}{4}$
How many regular polygons have integer interior angles? $22$	interior angle is integer if exterior angle is an integer. $\frac{360}{n}$ is integer when n is a factor of 360.

$x, 4, 3, 4, 5, 6, 8, 9, 10, 12, 15, 18, 20, 24, 30, 36, 40, 45, 60, 72, 90, 120, 180, 360.$